

W
AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ralph E. Sipple et al.

Serial No.: 09/304,406

Filing Date: May 4, 1999

For: VIDEO ON TRANSACTION SERVER

Docket No.: 33012/263/101



Examiner: H. Lonsberry

Group Art Unit: 2623

TRANSMITTAL SHEET

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

<p><u>CERTIFICATE UNDER 37 C.F.R. 1.8:</u></p> <p>I hereby certify that this correspondence and the documents described herein are being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this <u>12th</u> day of <u>February</u>, 2007.</p> <p style="text-align: right;">By: <u>Carolyn I. Erickson</u></p>

We are transmitting herewith the attached:

- ☐ A check in the amount of \$ _____ is enclosed.
- ☐ Small entity status of this application under 37 C.F.R. 1.9 and 1.27 has been established.
- ☒ Other: APPELLANT'S SUPPLEMENTAL APPEAL BRIEF FILED UNDER 37 CFR § 41.37 IN TRIPLICATE.
- ☒ Please charge any deficiencies or credit any over payment in the enclosed fees to Deposit Account 14-0620.

By: Wayne A. Sivertson

Wayne A. Sivertson
Reg. No. 25,645

NAWROCKI, ROONEY & SIVERTSON, P.A.
Suite 401, Broadway Place East
3433 Broadway Street N.E.
Minneapolis, Minnesota 55413
Telephone: (612) 331-1464
Facsimile: (612) 331-2239



P A T E N T

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of)	
)	
Ralph E. Sipple et al)	Examiner H. Lonsberry
)	
Serial No. 09/304,406)	Group Art Unit 2623
)	
Filing Date: 05/04/99)	
)	Docket No. 33012/263/101
)	
For: VIDEO ON TRANSACTION)	<u>SUPPLEMENTAL</u>
SERVER)	<u>APPEAL BRIEF</u>

APPELLANT'S SUPPLEMENTAL APPEAL BRIEF
FILED UNDER 37 C.F.R. § 41.37

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

CERTIFICATE UNDER 37 C.F.R. 1.8: I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner for Patents, Alexandria, VA, 22313-1450 on this 12th day of February, 20 07.

By Carolyn I. Erickson

This supplemental appeal brief is being filed in triplicate within 30 days of the Notice of non-Compliant Appeal Brief mailed on January 11, 2007. Permission is hereby granted to charge or credit deposit account number 14-0620 for any errors in fee

calculation. Appellants request this Supplemental Appeal Brief be made of record and fully considered.

\REAL PARTY IN INTEREST

The Real Party in interest is:

Unisys Corporation

Township Line and Union Meeting Roads

Blue Bell, Pennsylvania 19424

being the assignee of the entire right, title, and interest by all inventors, by way of assignment documents filed at Reel 9944, frame 0174, in the United States Patent and Trademark Office.

RELATED APPEALS AND INTERFERENCES

There are no known pending Appeals and/or Interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal. Therefore, there are no decisions to be placed in the attached Related Proceedings Appendix.

TABLE OF CONTENTS

TABLE OF CONTENTS	3
STATUS OF CLAIMS	7
STATUS OF THE AMENDMENTS	7
SUMMARY OF CLAIMED SUBJECT MATTER	9
GROUND OF REJECTION TO BE REVIEWED ON APPEAL	18
ARGUMENT	
.	19
I. Claims 1, 6, and 11-24 are not obvious over Baker in view of Yurt.....	19
I.A. Claim 1 is not obvious over Baker in view of Yurt.	19
I.B. Claim 6 is not obvious over Baker in view of Yurt.....	24
I.C. Claim 11 is not obvious over Baker in view of Yurt.....	25

I.D. Claim 12 is not obvious over Baker in view of	
Yurt.....	26
I.E. Claim 13 is not obvious over Baker in view of	
Yurt.	26
I.F. Claim 14 is not obvious over Baker in view of	
Yurt.....	.27
I.G. Claim 15 is not obvious over Baker in view of	
Yurt.....	27
I.H. Claim 16 is not obvious over Baker in view of	
Yurt.....	28
I.I. Claim 17 is not obvious over Baker in view of	
Yurt.	28
I.J. Claim 18 is not obvious over Baker in view of	
Yurt.....	.29
I.K. Claim 19 is not obvious over Baker in view of	
Yurt.....	20
I.L. Claim 20 is not obvious over Baker in view of	
Yurt.....	29
I.M. Claim 21 is not obvious over Baker in view of	
Yurt.	30
I.N. Claim 22 is not obvious over Baker in view of	
Yurt.....	.31

I.O.	Claim 23 is not obvious over Baker in view of Yurt.....	31
I.P.	Claim 24 is not obvious over Baker in view of Yurt.....	31
II.	Claims 2-5 are not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.....	31
II.A.	Claim 2 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.....	32
II.B.	Claim 3 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.....	34
II.C.	Claim 4 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.....	35
II.D.	Claim 5 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.....	35
III.	Claims 7-10 are not obvious over Baker in view of Yurt and further in view of Bennett.....	36
III.A.	Claim 7 is not obvious over Baker in view of Yurt and further in view of Bennett.....	36

III.B. Claim 8 is not obvious over Baker in view of Yurt and further in view of Bennett.....	37
III.C. Claim 9 is not obvious over Baker in view of Yurt and further in view of Bennett...	37
III.D. Claim 10 is not obvious over Baker in view of Yurt and further in view of Bennett. . . .	38
IV. Claim 25 is not obvious over Baker in view of Yurt and further in view of Wilcox.....	38
CONCLUSION	39
CLAIMS APPENDIX	40
EVIDENCE APPENDIX	49
RELATED PROCEEDINGS APPENDIX	50

STATUS OF CLAIMS

The subject patent application was filed on May 4, 1999 containing claims 1-20. Claims 21-25 were newly added to the application by amendment filed July 6, 2004. One of more of pending claims 1-25 were amended by way of amendments filed August 30, 2002, February 5, 2003, June 19, 2003, November 12, 2003, January 12, 2004, July 6, 2004, March 29, 2005, September 12, 2005, and April 28, 2006. None of the pending claims has ever been found patentable over the prior art of record. Claims 1-25, herein appealed, stand finally rejected on July 31, 2006 and are presented in Appendix, in the form existing at the time of that final rejection. It is the final rejection of claims 1-25 on July 31, 2006 from which Applicant appeals.

STATUS OF THE AMENDMENTS

Applicant has filed responses to official actions on August 30, 2002, February 5, 2003, June 19, 2003, November 12, 2003, January 12, 2004, July 6, 2004, March 29, 2005, September 12, 2005, and April 28, 2006. As a result of these submissions, all requested amendments have been entered into the record. No Amendment After Final was filed in response to the Final Office Action mailed July

31, 2006. Thus, pending claims 1-25, recorded herewith as Appendix, are in the form of April 28, 2006 following submission of the last presented amendment.

SUMMARY OF CLAIMED SUBJECT MATTER¹

The present invention generally relates to digital data transmission of video information and more particularly to the delivery of user selected video information to subscribing users². The present invention overcomes many of the disadvantages found within the prior art by providing a video on demand system which separates the tasks of supplying video to subscribers from the tasks associated with managing the subscriber interface. The key to this approach is to provide an architecture in which the necessary functions are divided into two separate portions. A first subsystem, called a video server, is specifically dedicated to retrieving and transmitting the stream of video information. Virtually no other functions are performed by the video server. A second subsystem, called the transaction server, handles virtually all other functions including control interface with the subscribers, spooling of digitized video data, subscriber accounting, e-mail, facsimile, web access, etc.³.

¹ The references to the specification and drawings provided herein are only exemplary and are not deemed to be limiting. The purpose of the references is to enable the Board to more quickly determine where the claimed subject matter is described within the present application.

²See Specification at page 1 lines 17-19.

³See Specification at page 7, lines 4-12.

The video server has two primary design criteria. First, it must be highly optimized to handle the extremely high input/output data rates. In essence, this is the sole function of the video server, and therefore, the design of the video server hardware and software are most directed towards this characteristic. Because the role of the video subsystem is simplified and single dimensional, video subsystems may employ relatively simple, personal computers or may be implemented within a highly modularized, partitionable large mainframe computer having substantial real time input/output capabilities⁴.

The second major design criterion of the video server subsystem involves modularity. The addition of active subscribers, each viewing individual video programs (or the same program at different times), tends to increase the total input/output load of the video server subsystem linearly. Therefore, there is great economic incentive to design the video server subsystem in such a manner that the hardware resources to implement the video subsystem may be linearly increased in relatively small (and inexpensive) increments. In one embodiment of the present invention, the video server subsystem consists of one or more input/output data rate optimized, industry compatible computers operating under a readily available,

⁴See Specification at page 7, lines 13-19.

commercial operating system, such as Windows NT. Using 3 mbits/second per video stream as a standard, each such device can effectively service thousands of different and independent video streams. Within each video server, storage can be added to handle more video programs and communication interfaces can be added to provide more video streams. Therefore, the same design architecture and components are suitable for a wide range of system sizes, and the capital cost to the video programming supplier can be readily determined as further subscribers are added to the system⁵.

In a second embodiment, the video server subsystem is located within a large scale Unisys mainframe computer platform. Direct interface input/output bridges are utilized to transfer the digitized video data to an ATM network from memory. The number of these direct interface input/output bridges may be easily increased to accommodate increasing subscriber loading. A particular advantage of this embodiment is that digitized video programming can be spooled into and streamed from the same internal memory. Furthermore, for applications in which the transaction server and video server subsystems may be collocated, additional efficiencies are appreciated⁶.

⁵See Specification at page 7, line 20, through page 8, line 11.

⁶See Specification at page 8, lines 12-18.

Unlike the video server subsystem which is optimized to provide a low cost, highly modular approach to a single function, the transaction server is optimized to provide a low cost approach to a wide and highly expandable variety of functions. In fact, all of the functions of the video on demand system, except for the video streaming function performed by the video server, are accomplished by the transaction server. Typical tasks include: transactional interface with the subscribers, subscriber fee accounting, requested program spooling, video server subsystem control, receiving video from a satellite and storing it in an archive, links to other applications such as e-mail, facsimile, the world wide web, etc. Thus, the ideal hardware/software platform for implementation of the transaction server is a readily expandable, highly flexible, high availability, highly recoverable, realtime oriented mainframe system. In the preferred mode of the present invention, the Unisys 2200 is used to host the transaction server⁷.

In accordance with the present invention, a subscribing user transfers a programming request to the transaction server. The transaction server makes the required subscriber accounting entry and notifies the corresponding preloaded video server platform of the new subscriber request. If the asset is not preloaded, in

⁷See Specification at page 8, line 19, through page 9, line 7.

addition to the subscriber accounting, the transaction server must access the request video program and spool it for the video server. Depending upon the rate of use of the requested video program, the data might be stored in memory (for high volume use), on a disk or other mass storage device (for medium volume use), or in some other medium (for low volume use)⁸.

In one preferred embodiment of the present invention, the user is permitted to pause, reverse, or fast forward the requested video program through commands entered from the on-set subscriber box. These functions are intended to appear similar to normal VCR commands to the user. These commands are sent to the transaction server which utilizes them to control the corresponding video stream output of the video server subsystem. Thus the user is provided with all of the advantages of VCR rental without the need to physically transport the medium (i.e., cassette tape) back and forth between the rental store and the user site. Additionally, there are no fees for late tape return⁹.

In view of the power and flexibility of the transaction server, other diverse but somewhat related functions may be provided. For example, a user might order a pizza delivery via the on-set subscriber box to transaction server interface, or the user might

⁸See Specification at page 9, lines 8-15.

⁹See Specification at page 9, line 16, through page 10, line 1.

access the internet, e-mail, or faxes via the transaction server. If this interface is implemented over a readily available, publically accessible, network, such as the internet, many additional functions are possible¹⁰.

Claims 11 and 14 are the only pending claim having "means-plus-function" limitations. Claim 11 has six such limitations which are correlated to Applicants' disclosure as follows:

- a) "storing means"¹¹;
- b) "plurality of generating means"¹²;
- c) "identifying means"¹³;
- d) "temporarily storing means"¹⁴;
- e) "spooling means"¹⁵; and
- f) "plurality of streaming means"¹⁶.

Claim 14 which depends from independent claim 11 presents the additional "means-plus-function" limitation as follows:

- a) "processing means"¹⁷.

These are the only "means-plus-function" limitations of the pending claims.

¹⁰See Specification at page 10 lines 2-6.

¹¹See Specification at page 13, line 21, through page 14, line 1, and Fig. 1, elements 14, 16, and 18.

¹²See Specification at page 12, line 21 through page 13, lines 8-12,, and Fig. 1, element 32 (see also Fig. 10).

¹³See Specification at page 13, line 18, through page 14, line 3, and Fig. 1, element 12 and Fig. 11, element 164..

¹⁴See Specification at page 15, lines 4-5, and Fig. 2, element 55.

¹⁵See Specification at page 13, line 18, through page 14, line 3, and Fig. 1, element 12 (see also Fig. 11, element 146).

¹⁶See Specification at page 16, lines 8-11, and Fig. 1, elements 20, 22,.....24.

¹⁷See Specification at page 13, line 18, through page 14, line 3, and Fig. 1, element 12 (see also Fig. 11, element 142).

In accordance with the Notification of Non-Compliant Appeal Brief mailed January 11, 2007, Applicants herewith endeavor to "separately map each independent claim to the specification by page and line number and to the drawings if any".

Claim 1:

--- element a -- see Fig. 1, elements 14, 16, and 18, and the specification at page 13, line 21, through page 14, line 1;
--- element b -- see Fig. 2, element 55, and specification at page 15, lines 4-5;
--- element c -- see Fig. 1, element 12, and Fig. 11, element 164, and specification at page 13, line 18, through page 14, line 3; and
--- element d -- see Fig. 1, elements 20, 22,....24, and specification at page 16, lines 8-11.

Claim 6:

--- element a -- see Fig. 1, element 32 (see also Fig 10), and specification at page 12, line 21, through page 13, lines 12;
--- element b -- see Fig. 1, elements 14, 16, and 18, and specification at page 13, line 21, through page 14, line 1;
--- element c -- see Fig. 2, element 55, and specification at page 15, lines 4-5;
--- element d -- see Fig. 1, element 12, and Fig. 11, element 164, and specification at page 13, line 18, through page 14, line 3; and

--- element e -- see Fig. 1, elements 20, 22,....24, and specification at page 16, lines 8-11.

Claim 16:

--- element a -- see Fig. 1, elements 14, 16, and 18, and specification at page 13, line 21, through page 14, lines 1;

--- element b -- see Fig. 1, element 32 (see also Fig. 10), and specification at page 12, line 21, through page 12, line 12;

--- element c -- see Fig. 1, element 12, and Fig. 11, element 164, and specification at page 13, line 18, through page 14, line 3;

--- element d -- see Fig. 1, element 12 (see also Fig. 11, element 146), and specification at page 13, line 18, through page 14, line 3;

--- element e -- see Fig. 1, elements 20, 22,....24, and specification at page 16, lines 5-11; and

--- element f -- see Fig. 1, elements 20, 22,....24, and specification at page 16, lines 5-11.

Claim 21:

--- element a -- see Fig. 1, element 12, and Fig. 11, element 164, and specification at page 13, line 18, through page 14, line 3;

--- element b -- see Fig. 1, elements 14, 16, and 18, and specification at page 13, line 21, through page 14, line 1;

--- element c -- see Fig. 2, element 55, and specification at page 15, lines 4-5; and

--- element d -- see Fig. 1, elements 20, 22,...24, and
specification at page 16, lines 8-11.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Are claims 1, 6, and 11-24 unpatentable under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,583,561 issued to Baker et al (hereinafter referred to as "Baker") in view of U.S. Patent No. 5,132,992, issued to Yurt et al. (hereinafter referred to as "Yurt")?

2. Are claims 2-5 unpatentable under 35 U.S.C. 103(a) as being obvious over Baker in view of Yurt in view of U.S. Patent No. 5,826,085, issued to Bennett et al. (hereinafter referred to as "Bennett") and further in view of U.S. Patent No. 5,519,435, issued to Anderson (hereinafter referred to as "Anderson")?

3. Are claims 7-10 unpatentable under 35 U.S.C. 103(a) as being obvious over Baker in view of Yurt and further in view of Bennett?

4. Is claim 25 unpatentable under 35 U.S.C. 103(a) as being obvious over Baker in view of Yurt and further in view of U.S. Patent No. 6,678,891, issued to Wilcox et al. (hereinafter referred to as "Wilcox")?

ARGUMENT

I. Claims 1, 6, and 11-24 are not obvious over Baker in view of Yurt.

The Examiner has rejected claims 1, 6, and 11-24 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,583,561, issued to Baker et al in view of U.S. Patent No. 5,132,992, issued to Yurt et al. This rejection is respectfully traversed for failure of the Examiner to present a *prima facie* case of obviousness as specified by MPEP 2143 for the reasons provided below.

To make a *prima facie* case of obviousness, MPEP 2143 requires the Examiner to provide evidence and argument showing: 1) motivation to make the alleged combination; 2) reasonable likelihood of success of the alleged combination; and 3) all claimed elements within the alleged combination. The Examiner has failed to make any of these three required showings. Therefore, because the Examiner has not made a *prima facie* case of obviousness, Applicants need not and indeed cannot offer appropriate evidence and argument in rebuttal.

I.A. Claim 1 is not obvious over Baker in view of Yurt.

With regard to claim 1, the Examiner admits:

Baker fails to disclose a plurality of video servers directly coupled to the transaction server and temporary

memory directly coupled to the video server and the transaction server.

Apparently attempting to show motivation, the Examiner then goes on to say:

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Baker to utilize the direct connection to the transaction server as take (sic) by Baker, for the advantage of spreading out the load generated by a number of users by utilizing a plurality of video servers.

To the extent understandable, this statement is inadequate as a matter of law, because it is inconsistent with the specific teachings of the references.

Baker, column 6, lines 11-16, provides that the alleged combination is specifically inconsistent with the object of Baker stating:

Yet another object of this invention is to utilize a high-performance enterprise server computer system and asynchronous transfer mode communication devices to selectively distribute encoded, compressed, digital video data in real-time over a public switched integrated-services network to a large number of remotely located viewer sites. (emphasis added)

In short, not only does Baker not desire "the advantage of spreading out the load generated by a number of users by utilizing a plurality of video servers" as alleged by the Examiner, Baker actually teaches the advantages of using a large mainframe computer system instead. The system taught by Baker uses the same mainframe computer to access, "spool", and "stream" the requested program without any

anticipated need for "spreading out the load" as alleged by the Examiner.

Again, the Examiner fails to even mention his obligation to show reasonable likelihood of success.. The requirement to show evidence and/or argument establishing reasonable likelihood of success is specifically levied upon the Examiner to present a *prima facie* case of obviousness. Actually, the Examiner could not show reasonable likelihood of success, because the approaches of Baker and Yurt are mutually exclusive.

Further with regard to claim 1, for example, claim element c requires that the "transaction server spools said different video on demand programs from said data base storage to said temporary video storage memory" and claim element d requires that "said plurality of video servers....stream said spooled different video on demand programs from said temporary video storage memory to said plurality of subscriber receivers". In other words, claim 1 requires that "spooling" is accomplished by the "transaction server" and that "streaming" is accomplished by the "plurality of video servers".

In Baker, both of these functions are accomplished by the same entity, "video server 12". In the claimed invention, both the "transaction server" (i.e., "spooling") and the "plurality of video servers" (i.e., "streaming") handle video information. In Baker,

all video information is handled by "video server 12". The Examiner continues to read the claimed "transaction server" element on to "control server" 54 of Baker. Though both the claimed "transaction server" and "control server" 54 of Baker can handle subscriber requests, "control server" 54 of Baker cannot handle video data. Only video server 12 of Baker actually handles video programming data.

Baker specifically disclaims that "control server" 54 handles any video. Column 10, lines 50-60, wherein Baker states in part:

Control server 54 may....coordinate the access of the multiple Video Servers to the Video Library.....

Not only does Baker not disclose that "control server" 54 ever handles the video programming data, it specifically states that it does not.

This distinction was previously described to the Examiner in detail. In a prior response to Applicants' previous arguments, the Examiner earlier stated:

Likewise, claim 1 requires that the server spools the programs from the database storage to video storage memory, there is no mention of direct access in claims 1 and 6 as argued by application.

It was exceedingly difficult to understand why the Examiner equated "direct coupling" with the function of "spooling". Nevertheless, independent claims 1, 6, 11, 16, and 21 were previously amended to address this concern of the Examiner, even if not well founded.

As if to divert the discussion from Applicants' claimed invention wherein the claimed "transaction server" spools video programs into the claimed "temporary video storage memory" and the claimed "plurality of video servers" stream the spooled video data from the claimed "temporary video storage memory", the Examiner addresses "direct coupling" by making the clearly erroneous statement:

Yurt discloses a video on demand system in figure 1c in which a remote order processing and item data base (transaction server) 300 is directly coupled to a number of video servers 200..... (emphasis added)

This statement is clearly erroneous, because element 300 is specifically disclosed as REMOTE. Yurt discloses at column 4, lines 5-7:

Remote order processing and item database 300 preferably enables users to access desired items by remote communication.

Communication from element 300 is performed via "transmission system" 100 (see Fig. 1c). The nature of "transmission system" 100 is defined at column 3, lines 54-58, which states:

A user of the transmission and receiving system of the present invention preferably accesses transmission system 100 by calling a phone number or by typing commands into a computer.

It is disingenuous for the Examiner to allege that such a "dial-up" network constitutes the claimed "direct coupling".

Therefore, the rejection of claim 1, and all claims depending therefrom, should be reversed for failure of the Examiner to make any of the three showings required by MPEP 2143.

I.B. Claim 6 is not obvious over Baker in view of Yurt.

In rejecting independent claim 6, the Examiner makes a similar clearly erroneous finding of fact. He states:

A transaction server 54 (column 10, lines 37-64) responsively coupled to said data base storage system 12 and said plurality of subscriber receivers 22, capable of receiving said plurality of service requests, accessing said plurality of video programs corresponding to the server requests from said database storage system (column 7, lines 45-55, column 9, lines 1-4) spooling into memory 38 (column 8, line 61-column 9, line 3; 54-58);

This finding is clearly erroneous, because control server 54 of Baker cannot access the video programs from the database storage system, as explained above in detail. Only Video Server 12 can perform such access (see Fig. 1). Furthermore, main storage unit 38 is located within video server 12 (see Fig. 2), and therefore cannot be directly accessed by control server 54. In addition, the cited functionality of column 7, lines 45-55; column 9, line 9; and column, lines 54-58, is all accomplished within "video server" 12, wherein Fig. 2 shows the internal hardware of "video server" 12¹⁸ and Fig. 3 shows the software of "video server" 12¹⁹.

¹⁸See column 5, lines 55-56.

¹⁹See column 5, lines 59-61.

As discussed above in detail, the alleged combination of Baker with Yurt is particularly confusing because the "remote" element 300 is certainly not directly coupled anything. Therefore, the rejection of amended claim 6, and all claims depending therefrom, should be reversed.

I.C. Claim 11 is not obvious over Baker in view of Yurt.

Claim 11 is an independent apparatus claim having "means-plus-function" limitations. It requires separate and distinctive "temporarily storing means", "spooling means", and "streaming means". These elements are all incorporated within a single entity, video server 12, of Baker. Fig. 2 shows that main memory unit 38, which the Examiner has found to be the "spooling means" is a part of video server 12. Similarly, "streaming" is performed by video server 12. Even though the Examiner somehow finds network interface 18 to be a "streaming means", he cites column 10, lines 40-44, which clearly shows that video server 12 performs the "streaming" function. As with the other independent claims, claim 11 is limited by the "direct" coupling previously suggested by the Examiner, in response to which he now clearly erroneously alleges that remote, dial-up network coupling of Yurt is somehow "direct coupling".

The rejection of claim 11, and all claims depending therefrom, should be reversed.

I.D. Claim 12 is not obvious over Baker in view of Yurt.

Claim 12 depends from claim 11 and further limits the "generating means". Because Baker does not meet the limitations of claim 11 from which claim 12 depends, it cannot meet the further limitations of claim 12. The rejection of claim 12 should be reversed.

I.E. Claim 13 is not obvious over Baker in view of Yurt.

Claim 13 depends from claim 12 and further limits the "identifying means". In making his rejection, the Examiner makes the finding:

Regarding claim 13, Baker discloses that video server 12 or Control server 54 acts as a transaction gateway.

This finding is a clear error of law, because the Examiner has found that control server 54 of Baker is the claimed "identifying means" in his rejection of claim 11. Therefore, the suggestion by the Examiner that video server 12 "acts as a transaction gateway" by citing column 7, lines 28-55, Fig. 4, and column 10 lines 56 through column 11, line 22. is legally irrelevant.

Furthermore, in rejecting claim 2, the Examiner explicitly admits that "the combination of Baker and Yurt does not disclose a

transaction gateway....." (see bottom of page 20 through top of page 21). The rejection of claim 13 should be reversed for improper application of controlling law.

I.F. Claim 14 is not obvious over Baker in view of Yurt.

Claim 14 depends from claim 13 and further limits the "identifying means". In making his rejection, the Examiner confusing states:

Regarding claim 14, Baker discloses that video server 54 processes subscriber transactions (column 10, lines 54-64). (emphasis added)

This statement is confusing, because Baker has no "video server 54". To the extent, the Examiner really means "control server 54", his finding is clearly erroneous and unsupported by the citation, which ascribes the claimed functionality to "video server 12". To the extent that the Examiner really means "video server 12", his finding is incorrect as a matter of law, because claim 14 further limits the "identifying means", which has been found by the Examiner to be "control server 54" in his rejection of claim 11 from which claim 14 depends. Though this ambiguity has been previously shown to the Examiner, he has chosen to ignore the issue. The rejection of claim 14 should be reversed.

I.G. Claim 15 is not obvious over Baker in view of Yurt.

Claim 15 depends from claim 14 and further limits the "identifying means", which the Examiner has found to be embodied in control server 54 of Baker. In making his rejection the Examiner states:

Regarding claim 15, Baker discloses that video server 12 is a Unisys mainframe (column 8, lines 42-48).

This statement is legally irrelevant because it does not address the "identifying means" (found by the Examiner to be control server 54 of Baker) which is further limited by claim 15. Again, this matter has been previously indicated to the Examiner, and again he has chosen to ignore this clear error of law. Therefore, the rejection of claim 15 should be reversed as legally irrelevant.

I.H. Claim 16 is not obvious over Baker in view of Yurt.

Claim 16 is an independent method claim. Applicants' invention requires that the "transaction server" perform the "determining" and "assigning" steps. As explained above in detail, Baker explicitly teaches away from this method of operation. The rejection of claim 16, and all claims depending therefrom, should be reversed.

I.I. Claim 17 is not obvious over Baker in view of Yurt.

Claim 17 depends from claim 16 and is further limited by a user function handled by the "transaction server". The Examiner

ignores the claim limitation and rather cites Baker column 12, lines 7-17, which describes how video server 12 handles similar user functions. The rejection of claim 17 should be reversed for failure of the Examiner to address the claimed invention.

I.J. Claim 18 is not obvious over Baker in view of Yurt.

Claim 18 depends from claim 17 and is further limited by a user function handled by the "transaction server". The Examiner ignores the claim limitation and rather cites Baker column 12, lines 7-17, which describes how video server 12 handles similar user functions. The rejection of claim 18 should be reversed for failure of the Examiner to address the claimed invention.

I.K. Claim 19 is not obvious over Baker in view of Yurt.

Claim 19 depends from claim 18 and is further limited by a user function handled by the "transaction server". The Examiner ignores the claim limitation and rather cites Baker column 16, lines 5-9, which requires that video server 12 handle such user functions. The rejection of claim 19 should be reversed for failure of the Examiner to address the claimed invention.

I.L. Claim 20 is not obvious over Baker in view of Yurt.

Claim 20 depends from claim 19 and is further limited by a user function handled by the "transaction server". The Examiner ignores the claim limitation and rather cites Baker column 7, lines 33-51, which requires that video server 12 handle such user functions. The rejection of claim 20 should be reversed for failure of the Examiner to address the claimed invention.

I.M. Claim 21 is not obvious over Baker in view of Yurt.

In rejecting independent apparatus claim 21, the Examiner clearly erroneously finds element c of the claimed invention which requires the claimed "transaction server" to perform the spooling stating:

....wherein said software controlled transaction server 54 spools a requested one of said plurality of video programs.... (column 10 lines 54-64).

As explained above in detail, Baker teaches that video server 12 both "spools" the program and "streams" the program. Furthermore, Baker has no discussion about any "software" of "control server" 54. Though these issues have been previously explained to the Examiner, he persists in ignoring the clear teaching of the prior art. The rejection of claim 21, and all claims depending therefrom, should be reversed as based upon clearly erroneous findings of fact.

I.N. Claim 22 is not obvious over Baker in view of Yurt.

Claim 22 depends from claim 21 and further limits the "software controlled transaction server" in accordance with the handling of video programming data. As explained above in detail, Baker teaches that video programming data is handled only by video server 12. The rejection of claim 22 should be reversed.

I.O. Claim 23 is not obvious over Baker in view of Yurt.

Claim 23 depends from claim 22 and further limits the distribution system. Because the alleged combination cannot meet all of the limitations of claim 22 from which claim 23 depends, it cannot meet the limitations of claim 23 including these additional unique limitations. The rejection of claim 23 should be reversed.

I.P. Claim 24 is not obvious over Baker in view of Yurt.

Claim 24 depends from claim 23 and further limits the user request system. Because the alleged combination cannot meet all of the limitations of claim 23 from which claim 24 depends, it cannot meet the limitations of claim 24 including these additional unique limitations. The rejection of claim 24 should be reversed.

II. Claims 2-5 are not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.

Claims 2-5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Yurt in view of Bennett and further in view of Anderson. This ground of rejection should be reversed for failure of the Examiner to present a *prima facie* case of obviousness as specified by MPEP 2143.

II.A. Claim 2 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.

Claim 2 depends from claim 1 and further limits the software architecture of the transaction server. The Examiner admits that the alleged combination of Baker and Yurt does not have the limitations of claim 2. He somehow finds that the untenable further alleged combination with Bennett and Anderson has these limitations without having the architecture of Baker or Applicants' claimed invention.

With regard to motivation to combine Bennett, the Examiner states:

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the combination of Baker and Yurt to utilize the middleware environment of Bennett thus enabling applications on different machines to be seamlessly interconnected.
(Emphasis added)

This is precisely the unsupported conclusion attacked by the Court of Appeals for the Federal Circuit stating in part:

Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence". *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q. 2d 1614 (Fed. Cir. 1999).

Furthermore, the system taught by Baker teaches the advantages of using a single mainframe computer to perform all video handling operations (i.e., accessing, spooling, and streaming). Thus, even if Bennett teaches "enabling applications on different machines to be seamlessly interconnected", it is irrelevant, because the primary reference (i.e., Baker) teaches not to provide such an interconnection.

Thus, even though Baker states as its object to use a "high-performance enterprise computer system" as a video server, the Examiner disingenuously states:

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the combination of Baker, Yurt and Bennet (sic) to utilize the PC of Anderson as a video server, for the advantage of providing a low cost server which provides high-speed performance via a RAID array.

Ignoring the clear teaching of the references as suggested by the Examiner is clear error as a matter of law.

The Examiner completely ignores his obligation under MPEP 2143 to provide evidence and/or reasoning to show "likelihood of success" of the alleged combination.

Furthermore, the alleged combination does not meet all of the claimed limitations, because the Examiner bases his rejection on clearly erroneous findings of fact. The Examiner states:

Bennett discloses in Figure 2, a VOD system with a VOD server 234.... (emphasis added)

Anyone viewing Fig. 2 of Bennett will see that **SERVICES** 235 contains VIDEO ON DEMAND **SERVICE** 234 but shows no VOD "server".

The rejection of claim 2 should be reversed for failure of the Examiner to present a *prima facie* case of obviousness.

II.B. Claim 3 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.

Claim 3 depends from claim 2 and further limits the "transaction server". The Examiner makes the legally irrelevant statement that Baker shows the limitations relative to "video server 12". However, as the Examiner clearly admits, the alleged combination does not show the limitation with regard to "control server 54" which the Examiner alleges to be the claimed "transaction server". The rejection of claim 3 should be reversed for failure of the Examiner to present a *prima facie* case of obviousness.

II.C. Claim 4 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.

Claim 4 depends from claim 3 and further limits the claimed "transaction server". In making his response, the Examiner makes the legally irrelevant statement:

Regarding claim 4, Baker discloses that video server 12 may be a Unisys mainframe system (column 8, lines 43-51).

This statement is legally irrelevant, because claim 4 further limits the "transaction server" which the Examiner has found to be "control server" 54. The rejection of claim 4 should be reversed.

II.D. Claim 5 is not obvious over Baker in view of Yurt in view of Bennett and further in view of Anderson.

Claim 5 depends from claim 4 and further limits the "transaction server". In support of his rejection, the Examiner makes clearly erroneous findings of fact stating:

Regarding claim 5, Baker discloses that the transaction server may spool the video (column 8, line 61-column 9, line 3) and that the format can be MPEG 2 (column 7, lines 9-16). (emphasis added)

Again, the Examiner cites functions that Baker teaches should be performed by the video server 12, as if they were performed by a transaction server as claimed. Fig. 2 clearly shows that all of the structure and functionality cited by the Examiner to support his rejection resides within video server 12. Though this clear

error has been brought to the Examiner's attention on a number of occasions, he continues to ignore it. The rejection of claim 5 should be reversed.

III. Claims 7-10 are not obvious over Baker in view of Yurt and further in view of Bennett.

Claims 7-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Yurt and further in view of Bennett. This ground of rejection is respectfully traversed for failure of the Examiner to present a *prima facie* case of obviousness as specified by MPEP 2143.

III.A Claim 7 is not obvious over Baker in view of Yurt and further in view of Bennett.

Claim 7 depends from claim 6 and further limits the claimed "transaction server". In making his rejection, the Examiner makes the legally irrelevant statement that Baker shows similar limitations with regard to video server 12. However, the Examiner makes no showing that the alleged combination meets the limitations as claimed. That the Examiner continues to confuse the claimed functions of the "transaction server" and "video server" has been brought to the Examiner's attention on numerous occasions. Yet,

the Examiner continues to ignore this distinction. The rejection of claim 7 should be reversed.

III.B Claim 8 is not obvious over Baker in view of Yurt and further in view of Bennett.

Claim 8 depends from claim 7 and uniquely limits the transaction server. Because the alleged combination cannot meet the limitations of claim 7 from which claim 8 depends, it cannot meet the further limitations of claim 8. The rejection of claim 8 should be reversed for failure of the Examiner to present a *prima facie* case of obviousness.

III.C Claim 9 is not obvious over Baker in view of Yurt and further in view of Bennett.

Claim 9 depends from claim 8 and further limits the "transaction server". In making his rejection, the Examiner again cites material from Baker which relates to video server 12. As a result, the Examiner bases his rejection of claim 9 upon clearly erroneous findings of fact. Baker does not disclose "spooling" by the alleged "transaction server" (i.e., control server 54). The rejection of claim 9 should be reversed.

III.D Claim 10 is not obvious over Baker in view of Yurt and further in view of Bennett.

Claim 10 depends from claim 9 and further limits the claimed "transaction server". The Examiner makes his rejection alleging that Baker teaches the same limitations with respect to video server 12. As a result, his findings are legally irrelevant, because they do not address the claimed invention. The rejection of claim 10 should be reversed.

IV. Claim 25 is not obvious over Baker in view of Yurt and further in view of Wilcox.

Claim 25 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Baker in view of Yurt and further in view of Wilcox. This ground of rejection is respectfully traversed for failure of the Examiner to present a *prima facie* case of obviousness as required by MPEP 2143.

In making his rejection, the Examiner concludes "motivation" rather than meeting his burden of presenting evidence and/or reasoning showing motivation. The Examiner completely ignores the requirement to show "reasonable likelihood of success". The rejection of claim 25 should be reversed for failure to present a *prima facie* case of obviousness.

CONCLUSION

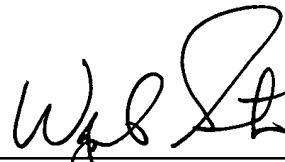
Having thus reviewed the final rejections of claims 1-25, being all pending claims, it seems abundantly clear that the limitations of these claims are not unpatentable in view of the prior art of record. Thus, the rejection of these claims should be reversed as being based upon clearly erroneous fact findings and errors of law.

Respectfully submitted

Ralph E. Sipple et al.

By their attorney,

Date February 12, 2007



Wayne A. Sivertson
Reg. No. 29,333
Suite 401, Broadway Place East
3433 Broadway Street N.E.
Minneapolis, MN 55413
(612) 331-1464

CLAIMS APPENDIX

5 1. In a video on demand system for supplying video data to a plurality of subscriber receivers via a program delivery network, the improvement comprising:

 a. A data base storage system containing a plurality of video on demand programs;

10 b. A temporary video storage memory;

 c. A transaction server directly coupled to said data base storage system, said temporary video storage memory, and said plurality of subscriber receivers whereby each of said plurality of subscriber receivers requests a different video on demand program
15 from said transaction server and said transaction server spools said different video on demand programs from said data base storage to said temporary video storage memory; and

 d. A plurality of video servers directly coupled to said transaction server and said temporary video storage memory and
20 responsively coupled to said plurality of subscriber receivers via said program delivery network wherein said plurality of video servers are assigned by said transaction server to stream said spooled different video on demand programs from said temporary video storage memory to said plurality of subscriber receivers via
25 said program delivery network.

2. The video on demand system of claim 1 wherein said transaction server further comprises a transaction gateway software module operating in a middleware environment and a video server frame and stream spooling program responsively coupled to said transaction gateway via said middleware environment and wherein each of said plurality of video servers further comprises an industry compatible personal computer.

3. The video on demand system of claim 2 further comprising a mainframe computer platform hosting said transaction server responsively coupled to said one of said plurality of video servers and said subscriber receiver.

4. The video on demand system of claim 3 wherein said mainframe computer platform further comprises a Unisys mainframe computer system.

5. The video on demand system of claim 4 wherein said transaction server spools said video on demand program in the MPEG-2 format.

6. An apparatus comprising:

a. A plurality of subscribing receivers each capable of providing a plurality of service requests;

b. A data base storage system which stores a plurality of video programs;

c. A temporary digital memory storage device;

d. A transaction server directly coupled to said plurality of
5 subscribing receivers, said temporary digital memory storage
device, and said data base storage system capable of receiving said
plurality of service requests, accessing said plurality of video
programs corresponding to said plurality of service requests from
said data base storage system, and spooling said plurality of
10 video programs into said temporary digital memory device in
response thereto; and

e. A plurality of video servers directly coupled to said
transaction server, said temporary digital memory storage device,
and said plurality of subscribing receivers wherein said
15 transaction server assigns one of said plurality of video servers
to stream said spooled plurality of video programs from said
temporary digital memory device to said plurality of subscribing
receivers.

7. An apparatus according to claim 6 wherein said transaction
20 server further comprises a subscriber account whereby each of said
plurality of subscribing receivers is charged for corresponding
ones of said plurality of service requests.

8. An apparatus according to claim 7 wherein said transaction server further comprises a transaction gateway operating in a commercial middleware environment.

9. An apparatus according to claim 7 wherein said plurality of spooled video programs further comprises MPEG-2.

10. An apparatus according to claim 9 wherein said transaction server further comprises a Unisys computer system.

11. A video on demand system comprising:

a. Storing means for storing a plurality of video programs;

b. Plurality of generating means for generating a plurality of different requested video on demand signals;

c. Identifying means directly coupled to said generating means and said storing means for identifying a number of said plurality of video programs stored within said storing means corresponding to said plurality of different requested video on demand signals;

d. temporarily storing means for temporarily storing said plurality of different requested video on demand signals;

e. Spooling means directly coupled to said identifying means, said temporarily storing means, and said storing means for spooling said corresponding number of said plurality of video programs from said storing means into said temporarily storing means which said
5 identifying means identifies; and

f. A plurality of streaming means directly coupled to said spooling means, said temporarily storing means, and said receiving means for streaming said spooled number of said plurality of video programs corresponding to said plurality of different requested
10 video on demand signals from said temporarily storing means to said plurality of generating means wherein said spooling means assigns one or said plurality of streaming means to stream said spooled number of said plurality of video programs to said plurality of generating means.

15 12. A video on demand system according to claim 11 wherein said plurality of generating means further comprises a subscriber box.

13. A video on demand system according to claim 12 wherein said identifying means further comprises a transaction gateway.

14. A video on demand system according to claim 13 wherein said identifying means further comprises processing means for processing subscriber transactions.

15. A video on demand system according to claim 14 wherein said identifying means further comprises a Unisys mainframe computer system.

16. A method of providing video on demand services comprising:

a. Storing a plurality of video programs in a video storage facility;

b. Receiving a video on demand request from a subscriber at a transaction server;

c. Determining a one of said plurality of video programs corresponding to said video on demand request by said transaction server;

d. Spooling said one of said plurality of video programs corresponding to said video on demand request from said video storage facility into a temporary storage facility by said transaction server;

e. Assigning one of a plurality of video servers responsively coupled to subscriber to stream said one of said plurality of video

programs corresponding to said video on demand request to said subscriber by said transaction server; and

f. Streaming said spooled video program from said temporary storage facility by said assigned video server to said subscriber.

5 17. A method according to claim 16 further comprising:

a. Pausing said streaming in response to a pause signal from said subscriber to said transaction server.

18. A method according to claim 16 further comprising:

10 a. Reversing said streaming in response to a reverse signal from said subscriber to said transaction server.

19. A method according to claim 16 further comprising:

a. Fast forwarding said streaming in response to a fast forward from said subscriber to said transaction server.

15 20. A method according to claim 16 wherein said processing step further comprises:

a. Performing subscriber accounting to enable billing said subscriber for said video on demand request by said transaction server.

21. An apparatus for delivering video on demand programs to a plurality of requesters comprising:

a. a software controlled transaction server directly coupled to said plurality of requesters which manages an interface between said apparatus and said plurality of requesters;

b. a storage facility directly coupled to said software controlled transaction server which contains a plurality of video programs;

c. a temporary memory directly coupled to said software controlled transaction server wherein said software controlled transaction server spools a requested one of said plurality of video programs requested by one of said plurality of requesters from said storage facility into said temporary memory; and

d. a plurality of video servers directly coupled to said temporary memory and said software controlled transaction server from which said software controlled transaction server assigns a particular one of said plurality of video servers wherein said particular one of said plurality of video servers streams said requested one of said plurality of video programs from said temporary memory to said one of said plurality of requesters.

22. An apparatus according to claim 21 further comprises a plurality of video program sources directly coupled to said

software controlled transaction server which stores said plurality of video programs from said plurality of video program sources in said storage facility.

23. An apparatus according to claim 22 further comprising a transmission network located intermediate said plurality of video servers and said plurality of requesters whereby said particular one of said plurality of video servers streams said requested one of said plurality of video servers to said one of said plurality of requesters.

24. An apparatus according to claim 23 wherein said one of said plurality of requesters further comprises a subscriber box.

25. An apparatus according to claim 24 further comprising a request generated by said one of said plurality of requesters transferred to said software controlled transaction server requesting the delivery of a pizza.

EVIDENCE APPENDIX

There is no evidence deemed appropriate to be included in this Appendix.

RELATED PROCEEDINGS APPENDIX

There are no decisions or other papers deemed appropriate to be included in this Appendix.